

## Bio-Innovator

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The SOBIN Annual General Meeting and director elections was held on April 23, 2009 at the Ridgetown Campus of the University of Guelph.. Re-elected to the position of SOBIN President is **Jim Nash**, President of Envirosshake Inc. and elected to the position of Vice President is **Mike Ireland** from the Sarnia Lambton Economic Partnership. **Jim Campbell**, General Manager of AGRIS Co-operative will also be continuing on in the role of Secretary/Treasurer.

This year SOBIN also welcomed two new Directors to the board: **Mr. Kim Cooper** and **Dr. Murray McLaughlin**.



Kim is the Agricultural Coordinator for the Municipality of Chatham Kent where he works closely with agricultural producers and industry to develop new business opportunities within the municipality. Kim has extensive agriculture business and marketing experience having worked in management positions with both private industry and commodity organizations over the past several years.



Murray comes to SOBIN as the new founding President and CEO of the Sustainable Chemistry Alliance (SCA). Prior to accepting his position with the SCA, Murray was Director of Business Development for the Canadian Light Source (Synchrotron) in Saskatoon. Murray has held several key positions in private, public and non-profits sectors including President and CEO of Foragen Technologies, President of Ontario Agri Food Technologies, and Deputy Minister of Saskatchewan Agriculture and Food. We look forward to both Kim and Murray's valued input and expertise into the area of bioproduct development.

Stepping down from the SOBIN Board of Directors are **Steve Bolt** (4years) from the Sustainable Chemistry Alliance; **Ron Anderson** (3years) from the Municipality of Chatham Kent and **Tracy Pringle** (2 years) from the Windsor Essex Development Commission. The SOBIN Board of Director's wishes to thank Steve, Ron and Tracy for their efforts and commitment over the past several years. Each of these individuals have brought valuable input and direction to SOBIN and we look forward to their continued involvement and support in the network as we move forward.

Rounding out the 2009 SOBIN Board of Directors are: **John Lawrence**, St. Clair College; **Rick LeHoux**, GreenField Ethanol; **Maik Luiken**, Lambton College; **Joe Ouellette**, Acrolab Ltd.; **Art Schaafsma**, Ridgetown Campus, University of Guelph; and **John Ward** of DuPont Canada.

## The Sustainable Chemistry Alliance (SCA)

### Focused on Commercial Innovative Opportunities

The Sustainable Chemistry Alliance (SCA) held its first full board meeting on May 26<sup>th</sup> followed by a members meeting. It was a successful day that increased the level of interest in the Alliance and its future activities.

The Board is made up of a strong group of people that cut across Industry, University, and Community aspects of commercialization. The Board makeup is as follows:

- Industry: Steve Bolt, retired from Dow Chemical Canada  
Bernard West, retired, Colors Canada and Chemicals Ltd., and Rhone Poulenc Canada  
Sandy Marshall, Lanxess  
Cameron Harris, WorleyParsons  
Paul Clark, retired from Nova Chemicals  
Bill White, retired from DuPont Canada
- Community: George Mallay, Sarnia-Lambton Economic Partnership
- Research: Joel Adams, University of Western Ontario  
Jean Hamel, Vice President, FPInnovation
- Associations: Richard Paton, President, Canadian Chemical Producers' Assoc.  
Gord Surgeoner, President, OAFT



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Murray McLaughlin is also a Director and has been contracted to be President and CEO of The Sustainable Chemistry Alliance (SCA). He is presently building the criteria for project reviews and assessments for funding within the Alliance. Several projects have already come to the Alliance for preliminary discussions.

The Sustainable Chemistry Alliance (SCA) is focused on investing in commercial ready projects of innovative technologies. These could be spin-offs from Universities, to someone bringing new technologies from other parts of the world to Canada. A complete and solid business plan will be a key requirement of any project supported by the Alliance. Another requirement will be matching funds from others. At this point SCA is trying to be flexible and not miss a project due to narrow criteria. The selection criteria are being developed at the present time.

The Alliance has 5 million dollars for investing over the next 4 years and the Board wants to ensure they maximize the benefits of their investments in commercial ready companies. Increased jobs; export/domestic markets; and creating new businesses are expected outcomes of the Alliance activities.

SOBIN as a member of the Sustainable Chemistry Alliance (SCA) will work closely with Murray McLaughlin on projects that fit with SOBIN'S mandate. By working together we will help build the knowledge based economy for Ontario and Canada.

## 2009 Suncor Sustainability Award

SARNIA, Ont., June 22, 2009- Lambton College and Suncor Energy are pleased to announce Shawn McKnight as the 2009 recipient of the Suncor Sustainability Award. The award is given to recognize an individual, group or organization that has made innovative contributions towards regional sustainability in the Sarnia-Lambton region. McKnight received his award at the Bluewater Sustainability Initiative Annual Forum held on May 28<sup>th</sup>, 2009.

"Shawn truly embodies the three pillars of Sustainability – social equity, ecological health, and economic viability," said Dr. Maike Luiken, Dean of Applied Research, Business Development and Innovation and Sustainable Development at Lambton College and also the Chair of the Selection Committee for the award.

A native of Sarnia, McKnight graduated with distinction from the University of Lethbridge in 1999 with a Bachelor of Fine Arts. He has been heavily involved in promoting sustainability and environmental causes since moving back to Sarnia in 2002. He is a co-founder of Sarnia Artwalk and the Community Native Plant Garden, he currently serves as the President of Sarnia Artwalk, Vice-President of the Sarnia Urban Wildlife Committee and as a board member of the Lambton Wildlife Committee. In 2007 he was recognized on the Mayor's Honour List for his accomplishments and dedication to the City of Sarnia.

An example of McKnight's innovative approach to sustainability is exemplified in the "Cork Board Project." This waste diversion project involves collecting and recycling used wine corks into cork boards which are then sold at The Urban Nature Centre, a storefront business operated by McKnight and his partner Tara Dimuzio. As with many of McKnight's initiatives, the Cork Board Project employs a socially inclusive mix of workers, including special needs adults, at-risk youth, the disabled and unemployed.

"Obviously I'm honoured and really happy that I was recognized," said McKnight. "I've been spending the last 10 years or so deeply involved in the natural environment, so it's great to see that this group has acknowledged my efforts."



The Suncor Sustainability Award was established in 2007 with funds from a donation made by Suncor Energy Foundation to Lambton College to establish the Suncor Sustainability Centre over a three-year period. Members of the public are invited to submit nominations for the award which are then evaluated by a Selection Committee comprised of Luiken and four members from the Bluewater Sustainability Initiative. Winners receive \$5,000 and a framed scroll. McKnight now joins 2008 award recipient Goodwill Industries – Essex, Kent, Lambton Inc.

**Shawn McKnight (centre) receives the 2009 Suncor Sustainability Award from Cheryl Levy (Suncor) and Tony Hanlon (Lambton College)**

## CARES Gaining Traction

Late last fall the Centre for Agricultural Renewable Energy and Sustainability (CARES) became an official Centre within the University of Guelph's Ontario Agriculture College (OAC) following an announcement by Dr. Robert Gordon, Dean of OAC. At this announcement Dean Gordon commented that, "OAC is committed to innovative research and technology transfer that supports the development of new technologies that will enhance our environment. CARES fits perfectly with this mandate. It will bring together highly skilled people and support applied research and knowledge transfer in renewable energy, which is relevant to the public, private and non-profit sectors."

SOBIN has played an integral role in the conception and development of CARES over the past three years. As a result, along with this official launch of CARES, the University and SOBIN showed further commitment to this concept by both signing a memorandum of understanding pledging to continue work together to promote bioproduct research and development opportunities.

With CARES officially launched, efforts continued to move forward with the duty of pulling together the team of individuals tasked with governing and managing the development of this centre. In January CARES held its inaugural meeting of its first board of directors. The CARES board of directors is made up of representation from government, industry and academia all interested in the Centre's goals of strengthening the agriculture sector, improving sustainability and development, increasing alternative energy and energy conservation, and leveraging education, training and research.

Dr. Abimbola Abiola - Olds College, Alberta

Mike Bouk – Ag Energy Co-op, Guelph

Kim Cooper– Municipality of Chatham-Kent

Greg Devries - Cedarline Farms, Dresden

Claude Faucher – Natural Resources Canada,

Gabrielle Ferguson – OMAFRA, Ridgetown

Dr. Robert Gordon– UofG Ontario Agriculture College, Guelph

Dr. Don Hewson - Sarnia Research Park, Sarnia

Matt McLean, SOBIN, Ridgetown

Dr. Art Schaafsma – UofG Ridgetown Campus

Jeff Schieck– OMAFRA, Guelph

Matt McLean of SOBIN has been elected to the position of Chair and Greg Devries of Cedarline Farms is Vice Chair.

On the project front, CARES is also moving along quite well. The centre's first project, a farm-scale biodiesel demonstration plant, is nearing the completion of its construction phase and is expected to be in production in the next couple of weeks. This biodiesel project is being funded in a large part through Agriculture and Agri-Food Canada's Advancing Canadian Agriculture and Agri-Food program, which is delivered in Ontario by the Agricultural Adaptation Council.

## University of Windsor Research into Biomass to Hydrogen Funded

Dr. Jerald Lalman, a professor in the Department of Civil and Environmental Engineering, received \$525,000 from the Natural Sciences and Engineering Research Council (NSERC) to convert biomass such as switchgrass, corn stover, wheat stalks and bagasse to hydrogen.

"We believe this could be an excellent way to produce a potential alternative energy source without having to rely on actual food crops."  
Dr. Lalman said.

Switchgrass is a warm-season tall grass that grows in prairies, along roadsides and is sometimes used as an ornamental plant. Corn stover consists of leaves and stalks of corn plants left in the field after harvest. Bagasse is residue left after sugar cane is crushed.

Researchers will extract valuable sugars from these materials then convert them to hydrogen through bacterial processes.

Lalman is the principle investigator for the project; joining him are Dan Heath of the Great Lakes Institute for Environmental Research and engineering professor Nihar Biswas. Other collaborators include Ralph Tanner from the University of Oklahoma, Peter Lau from the National Research Council, Mike Cotta from the U.S. Department of Agriculture and George Crawford of CH2M Hill, a Colorado-based global consulting and engineering corporation.

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**Jerald Lalman, right, watches as Subbarao Chaganti prepares sugar solutions that will be converted into hydrogen**

## Upcoming Events

### **6th Annual World Congress on Industrial Biotechnology & Bioprocessing - Montreal, PQ July 19 - 22, 2009**

The sixth annual World Congress on Industrial Biotechnology & Bioprocessing will take place at the beautiful Palais des congrès de Montréal.

[www.bio.org/worldcongress/Event/Venue.asp](http://www.bio.org/worldcongress/Event/Venue.asp)

### **Wind & Solar Energy Weekend Workshop**

Presented by True North Power - Join us in a 2 day **Hands-on** Training Workshop and learn the theory and practical application of PERSONAL POWER SYSTEMS, wind turbines, towers, inverters, batteries, Grid Tie, solar and more.

**Date:** Sept 19<sup>th</sup> and 20<sup>th</sup>, 2009

**Time:** 8:00 a.m. - 5:00 p.m.

**Admission:** \$425.00 (10% discount for students)

**Location:** Lambton College - Suncor Sustainability Centre

### **Understanding Sustainability Workshop**

If you would like to better understand Sustainability concepts and discover practical tools to put Sustainable Development principles into practice, this workshop is for you. This workshop is designed to provide business and technical leaders with the tools they need to put sustainable development theory into practice. The workshop will feature presentations, case studies and practical tools to engage your workforce in sustainable practices. The workshop will take place in the Suncor Sustainability Centre and includes lunch and refreshment breaks.

**Date:** Sept 22nd, 2009

**Time:** 7:30am - 4:30pm

**Attendance Fee: \$225 CDN + GST**

**Location:** Suncor Sustainability Centre, Lambton College

For more information or to register for either of the two workshops above please contact:

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## WHO WE ARE

The mission of SOBIN is to strengthen the economy of Southwestern Ontario by cultivating new bioproducts, fostering energy conservation and expanding alternative energy sources. We envision progressive companies leading the world in growing all facets of the bioproducts industry in Southwestern Ontario leading to a innovative regional economy.

Thanks to our **FUNDING PARTNERS**



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